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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,486	01/16/2002	Mark Schmidt	108-135USA000	4022

7590 12/16/2003

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EXAMINER

FUREMAN, JARED

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/053,486

Applicant(s)

SCHMIDT ET AL.

Examiner

Jared J. Fureman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11/12/03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Receipt is acknowledged of the amendment, terminal disclaimer, and proposed drawing corrections, filed on 9/16/2003, and the IDS, filed on 11/12/2003, all of which have been entered in the file. Note that some of the references listed on the IDS have been lined through since they were previously cited on a PTO-892. Claims 21-68 are pending.

#### ***Drawings***

1. The proposed changes to the drawings, filed on 9/16/2003, have been approved by the examiner.

#### ***Terminal Disclaimer***

2. The terminal disclaimer filed on 9/16/2003 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any U.S. Patent granted on application numbers 10/125,698 and 10/125,303 has been reviewed and is accepted. The terminal disclaimer has been recorded.

#### ***Claim Objections***

3. Claims 21, 27, 33, 39, 45, 51, 57, and 63: are objected to because of the following informalities:

Re claim 21:

Line 12, "the system" (both occurrences) lacks proper antecedent basis, "system" (both occurrences) should be replaced with --housing--.

Line 23, "the price" and "the weight" lack proper antecedent basis, "the" (both occurrences) should be replaced with --a--.

Re claim 27:

Line 2, "the transmission control protocol/internet protocol (TCP/IP)" lacks proper antecedent basis, "the" should be replaced with --a--.

Lines 3, "the World Wide Web (WWW)" lacks proper antecedent basis, "the" should be replaced with --a--.

Re claim 33:

Lines 14-15, "the cashier's side of said housing" lacks proper antecedent basis.

Line 18, "the customer's side of said housing" lacks proper antecedent basis.

Line 23, "the price" and "the weight" lack proper antecedent basis, "the" (both occurrences) should be replaced with --a--.

Re claim 39:

Line 2, "the transmission control protocol/internet protocol (TCP/IP)" lacks proper antecedent basis, "the" should be replaced with --a--.

Line 3, "the World Wide Web (WWW)" lacks proper antecedent basis, "the" should be replaced with --a--.

Re claim 45:

Lines 14-15, "the cashier's side of said housing" lacks proper antecedent basis.

Line 18, "the customer's side of said housing" lacks proper antecedent basis.

Line 23, "the price" and "the weight" lack proper antecedent basis, "the" (both occurrences) should be replaced with --a--.

Re claim 51:

Line 2, "the transmission control protocol/internet protocol (TCP/IP)" lacks proper antecedent basis, "the" should be replaced with --a--.

Lines 2-3, "the World Wide Web (WWW)" lacks proper antecedent basis, "the" should be replaced with --a--.

Re claim 57:

Lines 13-14, "the cashier's side of said housing" lacks proper antecedent basis.

Line 17, "the customer's side of said housing" lacks proper antecedent basis.

Line 22, "the price" and "the weight" lack proper antecedent basis, "the" (both occurrences) should be replaced with --a--.

Re claim 63:

Line 2, "the transmission control protocol/internet protocol (TCP/IP)" lacks proper antecedent basis, "the" should be replaced with --a--.

Line 3, "the World Wide Web (WWW)" lacks proper antecedent basis, "the" should be replaced with --a--.

Appropriate correction is required.

4. Applicant is advised that should claims 22, 32, and 21-32 be found allowable, claims 35, 44, and 45-56, respectively, will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21, 22, 32, 35, 44-46, 56, 59, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al (US 5,886,336) in view of Negishi et al (US 5,153,585) and Ferguson et al (US 5,256,863).

Tang et al teaches a point of sale station for installation in a retail shopping environment, comprising: a counter-surface (18) installed in the retail shopping environment, a bar code reading system (scanner 10) installed in the counter-surface, the bar code reading system including: a bioptical laser scanning bar code reading unit having a bottom portion having a horizontal scanning window (first window 24) installable through the counter-surface, and a vertical portion operably connected with the bottom portion and having a vertical scanning window (second window 26), an electronic produce scale (not shown) integrated within the bottom portion of the bioptical laser scanning bar code reading unit, a housing (20) connected to the vertical portion of the bioptical laser scanning bar code reading unit, defining a cashier's (clerk 16) side of the system and a customer's (not shown) side of the system, wherein the electronic produce scale further comprises a produce weigh tray (22) supported upon the bioptical laser scanning bar code reading unit and having a recessed surface region for slidably receiving the full weight of produce items under gravitational loading so that the full

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weight of the produce items to be purchased is accurately measured by the electronic produce scale integrated within the bottom portion of the bioptical laser scanning bar code reading unit (see figures 1, 2, column 2 line 65 - column 3 line 27, column 3 line 41 - column 4 line 8).

Tang et al fails to specifically teach a cashier-scale terminal integrated with the bioptical laser scanning bar code reading unit, and having a first visual display panel and a first keyboard provided on the cashier's side of the housing, a customer-kiosk terminal integrated with the bioptical laser scanning bar code reading unit, and having a second visual display panel provided on the customer's side of the housing, wherein the first display panel at the cashier-scale terminal enables the cashier to enter information into the cashier-scale terminal regarding produce items to be weighed by the electronic produce scale, as well as display such information for the cashier to review, and wherein the second display panel at the customer-kiosk terminal enables the customer to view a displayed weight and price of weighed items being displayed on said second display panel, wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels, respectively, during transactions, while the customer is permitted to view the displayed weight and price of weighed items.

Negishi et al teaches an electronic scale (figure 1) having a cashier-scale terminal, and having a first visual display panel (on the side of the housing 30 facing the cashier) and a first keyboard (18) provided on the cashier's side of the scale, a

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customer-kiosk terminal integrated with the scale, and having a second visual display panel (one the side of the housing 30 facing the customer) provided on the customer's side of the scale, wherein the first display panel at the cashier-scale terminal enables the cashier to enter information (price per unit weight, for example) into the cashier-scale terminal regarding items to be weighed by the electronic scale, as well as display such information for the cashier to review, and wherein the second display panel at the customer-kiosk terminal enables the customer to view a displayed weight and price of weighed items being displayed on said second display panel, wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels, respectively, during transactions (as shown in figures 1 and 2, since the first and second display panels are directly opposite each other in the housing, the first and second display panels are aligned along a common viewing plane passing through the housing so that a cashier and a customer are facing each other), while the customer is permitted to view the displayed weight and price of weighed items (see figures 1-3, column 2 line 32 - column 3 line 12, and column 5 lines 24-35).

In view of Negishi et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include with the system as taught by Tang et al, a cashier-scale terminal integrated with the bioptical laser scanning bar code reading unit, and having a first visual display panel and a first keyboard provided on the cashier's side of the housing, a customer-kiosk terminal integrated with the bioptical



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laser scanning bar code reading unit, and having a second visual display panel provided on the customer's side of the housing, wherein the first display panel at the cashier-scale terminal enables the cashier to enter information into the cashier-scale terminal regarding produce items to be weighed by the electronic produce scale, as well as display such information for the cashier to review, and wherein the second display panel at the customer-kiosk terminal enables the customer to view the displayed weight and price of weighed items being displayed on said second display panel, wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels, respectively, during transactions, while the customer is permitted to view the displayed weight and price of weighed items; in order to provide a display for displaying the weight, price per unit weight, and total price of a weighed item to the customer, thereby allowing the customer to verify the data and the transaction before the transaction is completed.

Tang et al as modified by Negishi et al fails to specifically teach the customer-kiosk having a second keyboard integrated therewith provided on the customer's side of the housing, and the second display panel at the customer-kiosk terminal enabling the customer to view a displayed price of scanned items as well as enter and display information pertaining to financial transactions being carried out in connection with the purchase of products and/or produce at the POS environment, wherein the first and second display panels are realized as a first and second liquid crystal display panels,

wherein the customer-kiosk terminal includes a network interface controller card operably coupled to a system bus architecture for enabling data packet communications over a packet-switched network information network and a multi-port Ethernet hub device connected to the network interface controller card and the customer-kiosk terminal so that the system has one or more Ethernet data ports for operable connection to the packet-switched network, wherein the vertical portion of the bioptical laser scanning bar code reading unit, the cashier-scale terminal and the customer-kiosk terminal are contained in a housing of generally unitary construction, wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels, respectively, during POS transactions, while the customer is permitted to view the displayed price of scanned items.

Ferguson et al teaches a bar code reading system (including a unit 18), a housing defining a cashier's side (figure 3) of the system and a customer's side (figure 4) of the system, a cashier terminal integrated with the bar code reading system and having a first visual display panel (48) and a first keyboard (keypad 100 and keys 102, 104, 106, 108, 110, 112, 114, 116, 118, 120, and 122) provided on the cashier's side of the housing, a customer-kiosk terminal integrated with the bar coder reading system and having a second visual display panel (50) and a second keyboard (keypad 124 and keys 126, 128, 130, 132, 134, and 136) integrated therewith provided on the customer's side of the housing, wherein the second display panel at the customer-kiosk terminal

enables the customer to view totals as well as enter and display information (magnetic card information and personal identification numbers, for example) pertaining to financial transactions being carried out in connection with the purchase of products and/or produce at the POS environment, wherein the first and second display panels are realized as a first and second liquid crystal display panels, wherein the customer-kiosk terminal includes a network interface controller card operably coupled to a system bus architecture for enabling data packet communications over a packet-switched network information network (LAN 12 can be an Ethernet network, thereby necessarily including a NIC card) and a multi-port Ethernet hub device connected to the network interface controller card and the customer-kiosk terminal so that the system has one or more Ethernet data ports for operable connection to the packet-switched network (since multiple terminals are shown, a multi-port Ethernet hub having one or more Ethernet data ports is necessarily present), wherein all the components (including the cashier terminal and the customer-kiosk terminal are contained in a housing of generally unitary construction), wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels (as shown in figures 3 and 4, since the first and second display panels are directly opposite each other in the housing, the first and second display panels are aligned along a common viewing plane passing through the housing so that a cashier and a customer are facing each other), respectively, during POS transactions, while the customer is permitted to view the displayed price of

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scanned items (see figures 1-4, column 1 lines 5-11, column 4 line 55 - column 5 line 25, column 5 line 60 - column 6 line 11, column 8 lines 5-63, column 9 lines 5-10, column 9 line 31 - column 10 line 44, column 11 line 38 - column 12 line 2, column 12 lines 20-27, and column 13 line 45 - column 14 line 20).

In view of Ferguson et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, the customer-kiosk having a second keyboard integrated therewith provided on the customer's side of the housing, and the second display panel at the customer-kiosk terminal enabling the customer to view a displayed price of scanned items as well as enter and display information pertaining to financial transactions being carried out in connection with the purchase of products and/or produce at the POS environment, wherein the first and second display panels are realized as a first and second liquid crystal display panels, wherein the customer-kiosk terminal includes a network interface controller card operably coupled to a system bus architecture for enabling data packet communications over a packet-switched network information network and a multi-port Ethernet hub device connected to the network interface controller card and the customer-kiosk terminal so that the system has one or more Ethernet data ports for operable connection to the packet-switched network, wherein the vertical portion of the bioptical laser scanning bar code reading unit, the cashier-scale terminal and the customer-kiosk terminal are contained in a housing of generally unitary construction, wherein said first display panel at said cashier-scale terminal is aligned with said second display panel at said customer-kiosk

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terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other and said first and second display panels, respectively, during POS transactions, while the customer is permitted to view the displayed price of scanned items, in order to provide a single terminal device that enhances functionality at a retail outlet in a cost-effective manner (see column 4 line 68 - column 5 line 3).

7. Claims 24, 25, 33, 34, 36, 37, 48, 49, 57, 58, 60, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al and Ferguson et al in view of Snyder (US 6,502,749 B1).

The teachings of Tang et al as modified by Negishi et al and Ferguson et al have been discussed above.

Tang et al as modified by Negishi et al and Ferguson et al fails to specifically teach the second keyboard being realized as a touch-screen keypad mounted on the second liquid crystal display panel, wherein the customer-kiosk terminal is realized as a modular assembly connectable to the housing, and wherein the modular assembly comprises an automated teller machine submodule removably detached to a first installation port provided on the housing, wherein the second display panel associated with the customer-kiosk terminal is provided with an advertisement/promotion mode capable of displaying advertisements and/or promotions while the cashier is not scanning products and the price and product information thereof is not being displayed on the second display, wherein the advertisements and promotions can relate to the products offered for sale in the kiosk-hosting retailer store, services and products

offered for sale in local and/or regional markets, as well as community news, sporting events, recreational events as well as local educational programs.

Snyder teaches a point of sale station for installation in a retail shopping environment, comprising: a customer-kiosk terminal including a display panel (78a), a keypad which is realized as a touch-screen keypad mounted on the display panel, wherein the customer-kiosk terminal is realized as a modular assembly connectable to a housing (a housing of the checkout system 10), and wherein the modular assembly comprises an automated teller machine submodule (electronic payment module 44, including a card reader, keypad, coin acceptor 46, bill acceptor 50, coin dispenser 48, bill dispenser 52, and receipt printer 54) removably detached to a first installation port (not shown) provided on the housing, wherein the display panel associated with the customer-kiosk terminal is provided with an advertisement/promotion mode capable of displaying advertisements and/or promotions while the cashier is not scanning products and the price and product information thereof is not being displayed on the second display, wherein the advertisements and promotions can relate to the products offered for sale in the kiosk-hosting retailer store, services and products offered for sale in local and/or regional markets (see figures 1, 3, 5, 9A, column 10 line 57 - column 11 line 67, column 16 line 44 - column 17 line 14, column 17 line 29 - column 18 line 3, column 25 lines 12-38, and column 60 lines 19-31).

In view of Snyder's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al and Ferguson et al, the second keyboard being realized as

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a touch-screen keypad mounted on the second liquid crystal display panel, wherein the customer-kiosk terminal is realized as a modular assembly connectable to the housing, and wherein the modular assembly comprises an automated teller machine submodule removably detached to a first installation port provided on the housing, wherein the second display panel associated with the customer-kiosk terminal is provided with an advertisement/promotion mode capable of displaying advertisements and/or promotions while the cashier is not scanning products and the price and product information thereof is not being displayed on the second display, wherein the advertisements and promotions can relate to the products offered for sale in the kiosk-hosting retailer store, services and products offered for sale in local and/or regional markets, as well as community news, sporting events, recreational events as well as local educational programs, in order to allow the customer to pay for the transaction without further assistance from the checkout clerk, thereby improving throughput of the system (see column 11 lines 25-49).

8. Claims 23 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al, Ferguson et al and Snyder in view of Hughes et al (US 5,754,655).

The teachings of Tang et al as modified by Negishi et al, Ferguson et al and Snyder have been discussed above.

Tang et al as modified by Negishi et al, Ferguson et al and Snyder fails to specifically teach the customer-kiosk including a phone submodule removably detached

to a second installation port provided on the housing, to support voice communication functions over a public telecommunications switching network.

Hughes et al teaches a customer-kiosk (300) including a phone submodule (310) attached (via cord 304) to an installation port provided on a housing, to support voice communication functions over a public telecommunications switching network (see figure 11, column 2 lines 15-27, and column 9 lines 8-30).

In view of Hughes et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, and Snyder, the customer-kiosk including a phone submodule removably detached to a second installation port provided on the housing, to support voice communication functions over a public telecommunications switching network, in order to provide a telephone in the event that a telephone is needed to complete a transaction (for example, the customer needs to contact a credit card issuer or a bank).

9. Claims 26, 30, 38, 42, 50, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al and Ferguson et al in view of Ring et al (US 6,244,510 B1) and Katoh et al (US 5,801,370).

The teachings of Tang et al as modified by Negishi et al and Ferguson et al have been discussed above. Tang et al also teaches the bioptical laser scanning bar code reading unit comprising a laser diode (30), light focusing optics (part of optical transceiver 34 and pattern mirrors M), scanning motor (38) and scanning optics (mirrored spinner) for producing and scanning laser scanning beams so as to project a



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laser scanning pattern through the horizontal and vertical scanning windows of the system, and scan bar codes (12) on objects (14) being moved thereby by the cashier, and light collection optics (pattern mirrors M and part of optical transceiver 34) for collecting and focusing the return laser light signal for subsequent photodetection, a laser scan data generator and processing module including a photodetector (42), for producing scan data signals, that are ultimately decode-processed in order to produce symbol character data representative of the bar code symbol being scanned by the system, and a computing platform (POS terminal 28 and control circuit 44) including a microprocessor, a memory architecture, a system bus architecture and an input/output interface connected to the system bus architecture for enabling the collection, processing and transport of data elements generated by the various components in the system (see figures 2-4 and column 3 lines 41- column 4 line 24).

Tang et al as modified by Negishi et al and Ferguson et al fails to specifically teach the laser diode being a visible laser diode.

Ring et al teaches a laser scanning bar code reading system (20) including a visible laser diode (169) (see figure 1, 3, column 2 lines 40-55, and column 9 lines 10-14).

In view of Ring et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al and Ferguson et al, the laser diode being a visible laser diode, in order to produce a visible scanning pattern, thereby allowing the operator to visually verify that the object having the bar code is located within the scanning field.

Tang et al as modified by Negishi et al, Ferguson et al, and Ring et al fails to specifically teach the bioptical laser scanning bar code reading unit comprising a plurality of visible laser diodes, light focusing optics, scanning motors, scanning optics, light collection optics, and photodetectors.

Kato et al teaches the bioptical laser scanning bar code reading unit comprising a plurality of laser beam sources (31A and 31B), scanning optics (mirrors 21A and 21B), light collection optics (22A and 22B), and photodetectors (4A and 4B) (see figures 2A, 2B, 3A, 3B, column 2 lines 34-60, column 4 line 10 - column 5 line 29).

In view of Kato et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, and Ring et al, the bioptical laser scanning bar code reading unit comprising a plurality of visible laser diodes, light focusing optics, scanning motors, scanning optics, light collection optics, and photodetectors, in order to provide redundancy, thereby allowing at least part of the laser scanning bar code reading unit to function if another part fails (one laser source will continue working even if the other laser source fails, for example).

10. Claims 62 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al, Ferguson et al, and Snyder in view of Ring et al and Kato et al.

The teachings of Tang et al as modified by Negishi et al, Ferguson et al and Snyder have been discussed above.

Tang et al as modified by Negishi et al, Ferguson et al, and Snyder fails to specifically teach the laser diode being a visible laser diode.

The teachings of Ring et al have been discussed above.

In view of Ring et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, and Snyder, the laser diode being a visible laser diode, in order to produce a visible scanning pattern, thereby allowing the operator to visually verify that the object having the bar code is located within the scanning field.

Tang et al as modified by Negishi et al, Ferguson et al, Snyder and Ring et al fails to specifically teach the bioptical laser scanning bar code reading unit comprising a plurality of visible laser diodes, light focusing optics, scanning motors, scanning optics, light collection optics, and photodetectors.

The teachings of Katoh et al have been discussed above.

In view of Katoh et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, Snyder, and Ring et al, the bioptical laser scanning bar code reading unit comprising a plurality of visible laser diodes, light focusing optics, scanning motors, scanning optics, light collection optics, and photodetectors, in order to provide redundancy, thereby allowing at least part of the laser scanning bar code reading unit to function if another part fails (one laser source will continue working even if the other laser source fails, for example).

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10. Claims 27, 28, 51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al, in view of Hunt et al (US 6,539,422).

The teachings of Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al have been discussed above.

Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al fails to specifically teach the computing platform having an operating system, networking software to support the transmission control protocol/Internet protocol, and Internet access software to access the world wide web and other information resources on the Internet.

Hunt et al teaches the use of a computing platform (computing system 103) with a bar code reading unit (automatic data collection devices, including bar code readers), the computing platform having an operating system, networking software to support the transmission control protocol/Internet protocol, and Internet access software to access the world wide web and other information resources on the Internet (see figures 1, 2, column 1 lines 13-30, column 2 lines 10-47, column 3 line 39 - column 5 line 62, and column 23 lines 16-55).

In view of Hunt et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al, computing platform having an operating system, networking software to support the transmission control protocol/Internet protocol, and Internet access software to access the world wide

web and other information resources on the Internet, in order to allow the bar code reading unit to access data and be controlled through a standardized network.

11. Claims 29 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al in view of Matsumori (US 6,179,206 B1).

The teachings of Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al have been discussed above.

Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al fails to specifically teach the customer-kiosk terminal including a bar code symbol reader integrated with a computing platform.

Matsumori teaches a customer-kiosk terminal (10) including a bar code symbol reader (34) integrated with a computing platform (the computing platform operating the terminal 10) (see figures 2, 4, column 3 lines 39-67, column 8 lines 19-35, and column 13 lines 41-56).

In view of Matsumori's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al, the customer-kiosk terminal including a bar code symbol reader integrated with a computing platform, in order to allow the use of a customer ID card containing a bar code identifying the customer, and thus, enabling the use of customer loyalty or incentive program.

13. Claims 41 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al, Ferguson et al, and Snyder in view of Matsumori.

The teachings of Tang et al as modified by Negishi et al, Ferguson et al, and Snyder have been discussed above.

Tang et al as modified by Negishi et al, Ferguson et al, and Snyder fails to specifically teach the customer-kiosk terminal including a bar code symbol reader integrated with a computing platform.

The teachings of Matsumori have been discussed above.

In view of Matsumori's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, and Snyder, the customer-kiosk terminal including a bar code symbol reader integrated with a computing platform, in order to allow the use of a customer ID card containing a bar code identifying the customer, and thus, enabling the use of customer loyalty or incentive program.

12. Claims 31, 43, 55, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al, Ferguson et al, and Matsumori in view of Hughes et al.

The teachings of Tang et al as modified by Negishi et al, Ferguson et al, and Matsumori have been discussed above.

Tang et al as modified by Negishi et al, Ferguson et al, and Matsumori fails to specifically teach the customer-kiosk terminal further including a telephone handset

integrated with the computing system to support voice communication functions over a public telecommunications switching network.

The teachings of Hughes et al have been discussed above.

In view of Hughes et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, and Matsumori, the customer-kiosk terminal further including a telephone handset integrated with the computing system to support voice communication functions over a public telecommunications switching network, in order to provide a telephone in the event that a telephone is needed to complete a transaction (for example, the customer needs to contact a credit card issuer or a bank).

13. Claims 63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al, Ferguson et al, and Snyder in view of Hunt et al.

The teachings of Tang et al as modified by Negishi et al, Ferguson et al, and Snyder have been discussed above.

Tang et al as modified by Negishi et al, Ferguson et al, and Snyder fails to specifically teach the computing platform having an operating system, networking software to support the transmission control protocol/Internet protocol, and Internet access software to access the world wide web and other information resources on the Internet.

The teachings of Hunt et al have been discussed above.

In view of Hunt et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, and Snyder, computing platform having an operating system, networking software to support the transmission control protocol/Internet protocol, and Internet access software to access the world wide web and other information resources on the Internet, in order to allow the bar code reading unit to access data and be controlled through a standardized network.

13. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al in view of Snyder and Hunt et al.

The teachings of Tang et al as modified by Negishi et al, Ferguson et al, Ring et al and Katoh et al have been discussed above.

Tang et al as modified by Negishi et al and Ferguson et al fails to specifically teach wherein the second display panel associated with the customer-kiosk terminal is provided with an advertisement/promotion mode capable of displaying advertisements and/or promotions while the cashier is not scanning products and the price and product information thereof is not being displayed on the second display.

The teachings of Snyder have been discussed above.

In view of Snyder's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, and Katoh et al, wherein the second display panel associated with the customer-kiosk terminal is provided with an



advertisement/promotion mode capable of displaying advertisements and/or promotions while the cashier is not scanning products and the price and product information thereof is not being displayed on the second display, in order to provide the benefits (increased sales and/or revenue generated from the sale of advertising space/time, for example) of advertising to the merchant.

Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, Katoh et al, and Snyder fails to specifically teach the computing platform having an operating system, networking software to support the transmission control protocol/Internet protocol, and Internet access software to access the world wide web and other information resources on the Internet.

The teachings of Hunt et al have been discussed above.

In view of Hunt et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Tang et al as modified by Negishi et al, Ferguson et al, Ring et al, Katoh et al, and Snyder, computing platform having an operating system, networking software to support the transmission control protocol/Internet protocol, and Internet access software to access the world wide web and other information resources on the Internet, in order to allow the bar code reading unit to access data and be controlled through a standardized network.

### ***Response to Arguments***

3. Applicant's arguments filed 9/16/2003 have been fully considered but they are not persuasive.

In response to applicant's argument that Tang et al, Negishi et al, and Ferguson et al, fail to teach the first display panel at the cashier-scale terminal being aligned with the second display panel at the customer-kiosk terminal along a common viewing plane passing through said housing so that the cashier and customer are facing each other, and the first and second display panels, respectively, during POS transactions, while the customer is permitted to view the displayed price of scanned items and the displayed weight and price of weighted items (see page 23 of the amendment filed on 9/16/2003), both Negishi et al and Ferguson et al teach the cashier display and the customer display being aligned along a common viewing plane passing through the housing (the display panels are arranged directly opposite each other on opposite sides of the housing, see figures 1 and 2 of Negishi et al and figures 3 and 4 of Ferguson et al) so that the cashier and customer are facing each other, and the first and second display panels, respectively, during transactions, while the customer is permitted to view the displayed information. Thus, the combined teachings of Tang et al, Negishi et al, and Ferguson et al meet these claimed limitations.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (703) 305-0424. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

December 11, 2003

*Jared J. Fureman*  
Jared J. Fureman  
Art Unit 2876